

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A tubeless tire wherein an air chamber is formed between an inner face of a tire body and a rim thereof, by mounting said tire body to the periphery of said rim; and

an inner liner layer is formed on said inner face of said tire body,
wherein said inner liner layer comprises a rubber composition containing as rubber components,

60 to 100% by weight of at least one kind of butyl rubber selected from the group consisting of butyl rubber, halogenated butyl rubber and a halogenated copolymer of isomonoolefin having 4 to 7 carbon atoms and paraalkylstyrene; and

0 to 40% by weight of at least one kind of diene rubber selected from the group consisting of natural rubber, isoprene rubber, styrene-butadiene rubber, butadiene rubber and styrene-isoprene-butadiene rubber; and

an inorganic filler represented by $nM \cdot xSiO_y \cdot zH_2O$, wherein n represents an integer of 1 to 5, M represents at least one metal selected from Al, Mg, Ti and Ca, or metal oxide, metal hydroxide or metal carbonate thereof, x represents an integer of 0 to 10, y represents an integer of 2 to 5 and z represents an integer of 0 to 10, wherein the content of said inorganic filler is at least 10 parts by weight based on 100 parts by weight of said rubber component; and

a gas barrier layer is formed on an inner face of said inner liner layer, wherein said gas barrier layer is formed of a gas barrier resin composition which contains an inorganic layered compound having a particle size of at most 5 μm and an aspect ratio of 50 to 5000, and a resin,

wherein said resin is at least one resin selected from the group consisting of polyvinyl alcohol and modified substances thereof, ethylene-vinyl alcohol copolymer and modified substances thereof, polysaccharide, polyacrylic acid and esters thereof, sodium polyacrylate, polybenzene sulfonic acid, polybenzene sodium sulfonate, polystyrene sulfonic acid, polystyrene sodium sulfonate, polyethylene imine, polyallyl amine and ammonium salts thereof, polyvinyl thiol, and polyglycerin.

2. - 5. (Cancelled)

6. (Previously Presented) The tubeless tire of Claim 1, wherein said gas barrier layer is formed on said inner face of said inner liner layer via an anchor coat layer.

7. - 8. (Cancelled)

9. (Previously Presented) The tubeless tire of Claim 1, wherein said inorganic layered compound is a clay mineral having swellability, that is swelled and cleaved in a solvent, and said resin is a high hydrogen bond resin comprising polyvinyl alcohol or polysaccharide; wherein in said gas barrier layer, said inorganic layered compound and said resin are mixed in a volume ratio of 5/95 to 90/10.

10. (Previously Presented) The tubeless tire of Claim 1, wherein said gas barrier layer is obtained by

dispersing said inorganic layered compound in said resin or a resin solution in a state of being swelled or cleaved in a solvent,

applying said solution to the inner face side of said inner liner layer while maintaining said state, and

removing said solvent.

11. (Previously Presented) The tubeless tire of Claim 1, wherein said gas barrier layer has a thickness of at most 0.5 mm.

12. (Cancelled)

13. (Previously Presented) The tubeless tire of Claim 1, wherein said rubber composition comprises an inorganic layered compound, wherein the content of said inorganic layered

compound included in said rubber composition is 0.5 to 20 parts by weight based on 100 parts by weight of said rubber component.

14. (Previously Presented) The tubeless tire of Claim 13, wherein said inorganic layered compound included in said rubber composition is organically treated.

15. - 18. (Cancelled)

19. (Previously Presented) The tubeless tire of Claim 1, wherein said gas barrier layer is formed on said inner face of said inner liner layer directly.

20. (Previously Presented) The tubeless tire of Claim 1, wherein said rubber composition comprises an inorganic layered compound having a particle size of at most 5 μm and an aspect ratio of 50 to 5000, which is dispersed in said rubber component.

21. (Cancelled)

22. (Previously Presented) The tubeless tire of Claim 1, wherein said rubber composition comprises a silane coupling agent.

23. (Cancelled)

24. (Previously Presented) A tubeless tire wherein an air chamber is formed between an inner face of a tire body and a rim thereof, by mounting said tire body to the periphery of said rim; and

a gas barrier layer formed of a gas barrier resin composition which contains an inorganic layered compound having a particle size of at most 5 μm and an aspect ratio of 50 to 5000, and a resin, is formed on said inner face of a carcass layer;

said carcass layer comprises a rubber composition containing a rubber component, an inorganic layered compound, an inorganic filler and a silane coupling agent, wherein said rubber component contains:

0 to 60% by weight of at least one kind of butyl rubber selected from the group consisting of butyl rubber, halogenated butyl rubber and a halogenated copolymer of isomonoolefin having 4 to 7 carbon atoms and paraalkylstyrene, and

40 to 100% by weight of at least one kind of diene rubber selected from the group consisting of natural rubber, isoprene rubber, styrene-butadiene rubber, butadiene rubber and styrene-isoprene-butadiene rubber;

said inorganic layered compound has a particle size of at most 5 μm and an aspect ratio of 50 to 5000, which is dispersed in said rubber component;

said inorganic filler is represented by $n\text{M}^x\text{SiO}_y\text{zH}_2\text{O}$, wherein n represents an integer of 1 to 5, M represents at least one metal selected from Al, Mg, Ti and Ca, or metal oxide, metal hydroxide or metal carbonate thereof, x represents an integer of 0 to 10, y represents an integer of 2 to 5 and z represents an integer of 0 to 10; and

said resin is at least one resin selected from the group consisting of polyvinyl alcohol and modified substances thereof, ethylene-vinyl alcohol copolymer and modified substances thereof, polysaccharide, polyacrylic acid and esters thereof, sodium polyacrylate, polybenzene sulfonic acid, polybenzene sodium sulfonate, polystyrene sulfonic acid, polystyrene sodium sulfonate, polyethylene imine, polyallyl amine and ammonium salt thereof, polyvinyl thiol, and polyglycerin.

25. (Previously Presented) The tubeless tire of Claim 24, wherein said inorganic layered compound of said gas barrier layer is a clay mineral having swellability, that is swelled and cleaved in a solvent, and

said resin is a high hydrogen bond resin comprising polyvinyl alcohol or polysaccharide;

wherein in said gas barrier layer, said inorganic layered compound and said resin are mixed in a volume ratio of 5/95 to 90/10.

26. (Previously Presented) The tubeless tire of Claim 24, wherein said gas barrier layer is obtained by

dispersing said inorganic layered compound in said resin or a resin solution in a state of being swelled or cleaved in a solvent,

applying said solution to the inner face side of said inner liner layer while maintaining said state, and

removing said solvent.

27. (Previously Presented) The tubeless tire of Claim 24, wherein said gas barrier layer has thickness of at most 0.5 mm.

28. (Previously Presented) The tubeless tire of Claim 24, wherein the content of said inorganic filler is at least 10 parts by weight based on 100 parts by weight of said rubber component.

29. (Previously Presented) The tubeless tire of Claim 24, wherein the content of said inorganic layered compound included in said rubber composition is 0.5 to 20 parts by weight based on 100 parts by weight of said rubber component.

30. (Previously Presented) The tubeless tire of Claim 24, wherein said inorganic layered compound included in said rubber composition is organically treated.

31. (Previously Presented) The tubeless tire of Claim 24, wherein said tire has no inner liner.